

This article is offered as the "Cradle of Forestry" celebrates the centennial of the first forestry school in North America. It was part 1 of a 4-part series. See *History on the Road* on page 42 for more information about the Cradle.



FOREST HISTORY SOCIETY ARCHIVES

# THE CRADLE OF FORESTRY

*WHERE TREE POWER STARTED*

**T**his is the last issue of *Biltmore Doings*. There will not be any more doings to report on." Such was the New Year's message sent out in 1914 from Darmstadt, Germany, by Carl Alwin Schenck, Director of Biltmore Forest School, in a farewell gesture to his 1913 class of "Biltmore Boys"—a class

which, incidentally, was in Marchfield, Oregon, awaiting him. His gesture, in reality, amounted to an obituary, signaling the death of his nationally famous forestry school. *Biltmore Doings* were reports to the alumni, keeping them posted on the "doings" of Schenck and his forestry students. And the "no more doings" letter, sent to students and friends in forestry and allied industries, was intended by Schenck to be his and the school's *Schwannennlied*, or swan song.

Nineteen years before, at the age of 27, he had been sum-

moned from his native Germany to serve as forester on George W. Vanderbilt's vast Biltmore Estate in western North Carolina and as he freely admitted, "The best fortune I could have met with anywhere became mine in America: fine fields to work in; good health to enjoy; enough to live on; and lots of friendship."

He quickly capitalized on his good fortune. Within three years he had not only proven his ability as a professional

**Above** Forestry students in front of the first forestry schoolhouse.

BY HARLEY E. JOLLEY

forester but had, in the autumn of 1898, opened the door to American forestry education by establishing the Biltmore Forest School, using the Vanderbilt forests for a campus. Gifford Pinchot, who preceded him as Biltmore forester, had been urging the creation of a school of forestry at the university level and Bernhard E. Fernow, fellow German, had lectured briefly on technical forestry at Massachusetts Agricultural College, 1887, but Schenck's forestry school was truly a pioneering venture. His emphasis and philosophy was different from that proposed by Pinchot and that instituted almost simultaneously by Fernow at Cornell University. Whereas they proposed a four year *theory oriented* university curriculum, he established a school in *practical forestry*, with his students being exposed to a twelve months combination of classroom lectures and field work. His classroom and woods philosophy, "That forestry is best which pays best," won him many friends among the lumbermen.

Interestingly, the educational views of Fernow, Schenck, and Pinchot were jointly presented in an 1899 American Forestry Association symposium, "The Training of Professional Foresters in America." In it Fernow took a vigorous slap at Schenck's practical forestry by stating that "The attempt to satisfy the popular but ignorant cry for so-called *practical instruction* usually leads to the production of superficial and incompetent practitioners, lacking a safe guide in thorough knowledge, although by no means lacking in self assurance." He also advised "any student of forestry in this country, as well as in any other, to lay as broad a foundation of theoretical knowledge as he can afford; he will be more successful in the end with his practice."

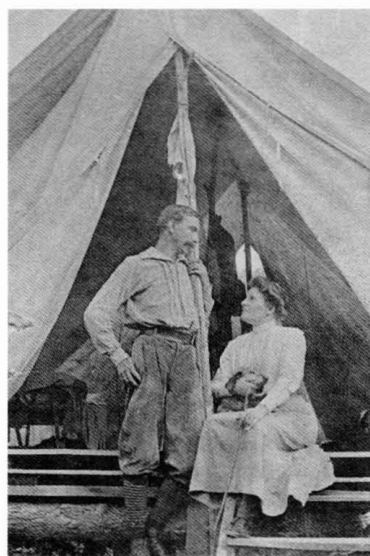
Schenck, with a German Doctor of Philosophy degree in forestry, fended the slap, using a practical defense: "The American forester, being employed for business purposes, must be well acquainted above all with the economic conditions of the various sections of the United States, and more especially with their lumber interests. The more time he spends traveling in the woods, in the lumber camps, in sawmills and wood-working establishments, the better for him. Knowledge thus acquired will be more valuable to him, the business forester, than a thorough acquaintance with chemistry, physics, zoology, mineralogy, geology and mathematics, with which forest students are packed full in Europe." He then deftly jabbed his point home: "It is as little feasible to study forestry from books at a university alone, as it is possible for the physician to become a master in his branch unless he has large experience in clinic and hospital work."

Pinchot, jumping into the affray, contended that the "forest student must have some knowledge of physical science, a good working acquaintance with the theory of forestry, and a considerable experience with the forest itself under a variety of conditions." He also cut at Schenck's scheme, in two ways. He began by announcing that "The first step, in my judgment, should be a college or university training, wherever that is possible." Secondly, he made a statement which gave partial support to Schenck's concept of practical forestry education: "Indeed, it will be well, in all cases, for the forest student to begin practical work before plunging too deeply into his theoretical training." But he immediately offered another

comment, well calculated to jeopardize Schenck's likelihood of securing the most highly qualified students: "For this purpose the position of student assistant in the Division of Forestry, United States Department of Agriculture, offers a valuable opportunity to a few well qualified men to become acquainted with the true nature of forest work." And to insure the attractiveness of his offer he added, "Students are paid at the rate of \$300 per annum, and all field expenses are borne by the Division."

This disparity in educational concepts continued to widen over the ensuing years with disastrous results for Schenck but in the meantime to him there flocked a variety of young men, largely from New England and the Midwest, seeking forestry education. Treating them more as apprentices than as academic scholars, their master involved each in a study-work program which complemented classroom presentation with the physical side of forestry: care of nurseries, transplanting of seedlings, timber selection, felling, logging, sawing, etc. Thus, at the end of the year the student was expected to have a few knowledgeable callouses to aid his textbook theories. And if he successfully passed the final examination and served a creditable apprenticeship for six months in some field of forestry he *could* receive a Bachelor of Forestry degree. Further apprenticeship, capped with a publishable research paper reporting and evaluating some forestry problem *might* entitle him to a Forest Engineer degree, conditioned always on the master's approval.

Under this program Schenck's graduates received a warm welcome from governmental agencies and private industry. Thus, for a few years his forestry school was a success. But two situations arose which eventually led to the abandonment of the Biltmore Forest School: parting of the ways between Schenck and Vanderbilt, coupled with continuing opposition from men like Fernow and Pinchot and an accompanying rash growth of rival forestry schools.



**Left** Dr. and Mrs. Schenck in Pisgah Forest.



**Right** Dr. Schenck in German Riding Costume, about 1905.

The break with Vanderbilt occurred in 1909 as a result of several factors. Over the years Schenck had had a rather abrasive relationship with other members of Vanderbilt's managerial staff and this was aggravated by worsening economic conditions which, according to Schenck, caused Vanderbilt to become "sick of forestry." He, therefore, instructed Schenck to sell Pisgah Forest, offering him a 10 percent commission. The forester's reaction was one of shock: "I was in utter despair. My life work was hopelessly destroyed. What was a commission of 10 percent for me who had never worked for money?"

In the meantime Vanderbilt departed for Europe but before he returned Schenck found what he thought was a highly acceptable alternative to selling Pisgah: he leased the hunting and fishing rights in the southern half of the forest to a sportsman's club for an annuity of \$10,000, payable in advance. To Schenck's dismay, "Mr. Vanderbilt, returning to Biltmore in spring 1909, treated me like a man who had utterly abused his confidence." Vanderbilt, venting his displeasure, called Schenck an "Idiot!" and dismissed him. Thus, said the victim, "I had lost my working field and my Biltmore Forest School had lost its working field, and—which is more important—the USA had lost its first tree farm."



Dr. Schenck in 1951 at a tree planting that commemorated the Biltmore Forest School's use of the Sunburst logging camp of the Champion Paper and Fibre Company in 1910. Also standing is Reuben Robertson.

The dismissal and subsequent severance of relations with the Vanderbilt estate did not immediately ring the death knell on the Biltmore Forestry School. Instead, the director converted it into an ambulatory institution with an itinerary which included study in all the major lumber producing areas of the United States as well as a semester abroad, featuring forestry in Germany. This approach was greatly facilitated by many courtesies provided by the lumber interests.

The system worked well at first, with about 40 young men enrolled, but by 1913 the number seeking admission was so small that Schenck became convinced that he faced eventual failure. This disconcerting condition was closely related to another: as early as 1903 Pinchot had urged George W. Vanderbilt to close out Schenck's Biltmore Forest School. The reasons behind this were multiple, but Pinchot and Fernow, among others, kept harping on the theme that Schenck's type of school was totally inadequate for producing the caliber of foresters which federal, state, and private forestry would demand. Both Pinchot and Fernow urged the establishment of a four year forestry curriculum at the universities. Fernow backed his urging by moving from Chief of Division of Forestry, United States Department of Agriculture, to Cornell University where in 1898, as director and dean, he organized the New York State College of Forestry and quickly began turning out college bred foresters.

Meanwhile, Pinchot, now head of the Division of Forestry, was unhappy with both Schenck's and Fernow's contributions to forestry education. Speaking of Schenck's School he sneered that "It had little academic standing" and added that "We in the Division of Forestry fully recognized the necessity for professional education in forestry in this country, but we had small confidence in the leadership of Dr. Fernow or Dr. Schenck." Pinchot's reasoning behind this statement reflected extreme American chauvinism rather than the cosmopolitan attitude that might have been expected from a forester whose basic knowledge was partially acquired in European forests and schools: "We distrusted them and their German lack of faith in American forestry. What we wanted was American foresters trained by Americans in American ways for the work ahead in American forests."

From this point of view Pinchot and Henry Solon Graves, his bosom associate in the Division of Forestry, talked the situation over and decided that since the kind of forest school that would meet the needs of the Division did not exist, the establishment of such a school was an absolute necessity. And in their eyes Yale University was the place for it, as both were Yale graduates. Following up the idea, the president of Yale was approached about the plan, gave immediate approval, accepted \$150,000 in endowment from the Pinchot family as a starter, and opened Yale Forest School in the fall of 1900, with Graves as professor of forestry. Soon other forestry schools appeared at various universities and all began recruiting students. The accumulative impact of this and the other factors was the basis for Schenck's "There will not any more Doings" and for the subsequent demise of his school. □